U.S. Patent Application No. 10/735,394

Reply to Office Action of October 17, 2005

Date: January 17, 2006

**Current Status of the Claims** 

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Claim 1 (currently amended): An inverted microscope having a U-shaped microscope housing

(1), on one limb (2) whereof is provided a horizontal changing surface (3) for optomechanical

optical and mechanical adaptation of a module,

wherein said module (4) comprises a horizontally protruding base unit (5) having on the one

hand a binocular tube (6) placed thereon, and on the other hand a photo tube (7), with photo

device (8), placed thereon and wherein said binocular tube (6) and said photo tube (7) extend

above said horizontal changing surface (3).

Claim 2 (currently amended): The inverted microscope as defined in Claim 1, wherein the

module (4) is embodied as a one-piece combination module (4; 5, 6, 7) and has on its underside a

module changing apparatus (9) that corresponds to is adapted to be received by the horizontal

changing apparatus surface (3).

Claim 3 (previously presented): The inverted microscope as defined in Claim 1, wherein the

vertical optical axis (10) of the observation beam bundle, extending in the one limb (2),

penetrates through a first optical deflection element (11) after entering the base unit (5), and then

passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13)

deflected at the optical deflection element (11), after passage through a second tube lens (14) and

after deflection at a second optical deflection element (15), enters the photo tube (7) with

attached photo device (8).

Claim 4 (previously presented): The inverted microscope as defined in Claim 3, wherein the

optical deflection element (11) can be selectably brought into or out of the working position.

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Claim 5 (previously presented): The inverted microscope as defined in Claim 1, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 6 (previously presented): The inverted microscope as defined in Claim 1, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 7 (original): The inverted microscope as defined in Claim 6, wherein the eyepieces (16a,

16b) have a periplan correction, and the eyepieces or TV adapters in the photo tube (7) or photo

device (8) have an HC correction.

Claim 8 (previously presented): The inverted microscope as defined in Claim 2, wherein the

vertical optical axis (10) of the observation beam bundle, extending in the one limb (2),

penetrates through a first optical deflection element (11) after entering the base unit (5), and then

passes through a first tube lens (12) arranged in the binocular tube (6), while the photo beam (13)

deflected at the optical deflection element (11), after passage through a second tube lens (14) and

after deflection at a second optical deflection element (15), enters the photo tube (7) with

attached photo device (8).

Claim 9 (previously presented): The inverted microscope as defined in Claim 3, wherein the

optical deflection element (11) can be selectably brought into or out of the working position.

Claim 10 (previously presented): The inverted microscope as defined in Claim 3, wherein the

optical deflection element (11) can be selectably brought into or out of the working position.

Claim 11 (previously presented): The inverted microscope as defined in Claim 8, wherein the

optical deflection element (11) can be selectably brought into or out of the working position.

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Claim 12 (previously presented): The inverted microscope as defined in Claim 2, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 13 (previously presented): The inverted microscope as defined in Claim 3, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 14 (previously presented): The inverted microscope as defined in Claim 4, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 15 (previously presented): The inverted microscope as defined in Claim 8, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 16 (previously presented): The inverted microscope as defined in Claim 9, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 17 (previously presented): The inverted microscope as defined in Claim 10, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 18 (previously presented): The inverted microscope as defined in Claim 11, wherein an

infinity beam exists in the region of the changing surface of the module changing apparatus (9).

Claim 19 (previously presented): The inverted microscope as defined in Claim 2, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 20 (previously presented): The inverted microscope as defined in Claim 3, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

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Claim 21 (previously presented): The inverted microscope as defined in Claim 4, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 22 (previously presented): The inverted microscope as defined in Claim 5, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 23 (previously presented): The inverted microscope as defined in Claim 8, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 24 (previously presented): The inverted microscope as defined in Claim 9, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 25 (previously presented): The inverted microscope as defined in Claim 10, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 26 (previously presented): The inverted microscope as defined in Claim 11, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 27 (previously presented): The inverted microscope as defined in Claim 12, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

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Claim 28 (previously presented): The inverted microscope as defined in Claim 13, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 29 (previously presented): The inverted microscope as defined in Claim 14, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 30 (previously presented): The inverted microscope as defined in Claim 15, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 31 (previously presented): The inverted microscope as defined in Claim 16, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 32 (previously presented): The inverted microscope as defined in Claim 17, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 33 (previously presented): The inverted microscope as defined in Claim 18, wherein the

eyepieces (16a, 16b) of the binocular tube (6) have a different degree of correction from those in

the photo tube (7) or photo device (8).

Claim 34 (previously presented): The inverted microscope as defined in Claim 19, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

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Claim 35 (previously presented): The inverted microscope as defined in Claim 20, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 36 (previously presented): The inverted microscope as defined in Claim 21, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 37 (previously presented): The inverted microscope as defined in Claim 22, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 38 (previously presented): The inverted microscope as defined in Claim 23, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 39 (previously presented): The inverted microscope as defined in Claim 24, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 40 (previously presented): The inverted microscope as defined in Claim 25, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 41 (previously presented): The inverted microscope as defined in Claim 26, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

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Claim 42 (previously presented): The inverted microscope as defined in Claim 27, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 43 (previously presented): The inverted microscope as defined in Claim 28, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 44 (previously presented): The inverted microscope as defined in Claim 29, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 45 (previously presented): The inverted microscope as defined in Claim 30, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 46 (previously presented): The inverted microscope as defined in Claim 31, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 47 (previously presented): The inverted microscope as defined in Claim 32, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.

Claim 48 (previously presented): The inverted microscope as defined in Claim 33, wherein the

eyepieces (16a, 16b) have a periplan correction, and the eyepieces or TV adapters in the photo

tube (7) or photo device (8) have an HC correction.